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THE EFFECT OF VOLUNTARY DISCLOSURE QUALITY AND LEVERAGE ON THE POTENTIAL OF FRAUDULENT FINANCIAL STATEMENTS WITH RETURN ON ASSETS (ROA) AS A MODERATING VARIABLE (EMPIRICAL STUDY ON PROPERTY AND REAL ESTATE COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE (IDX) IN 2020-2024)

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Abstract

An example of financial reporting manipulation that might deceive readers of financial statements is a fraudulent financial statement (FFS). Cases like PT Hanson International Tbk and the rising danger of FFS according to the Beneish M-Score from 2020 to 2024 show that this phenomenon is still a worry for Indonesian property and real estate enterprises. This research aims to analyze the impact of Voluntary Disclosure Quality and Leverage on the potential for FFS. Results for real estate and property businesses traded on the IDX from 2020 to 2024, with ROA as a moderating variable. A quantitative technique utilizing an associative method is utilized in the investigation. With 145 observations, the sample is comprised of 29 enterprises chosen by purposive selection. A variety of metrics are employed to assess financial statement fraud: the Beneish M-Score, the MD&A index for voluntary disclosure, the DER for leverage, and ROA for moderating effects. Multiple linear regression and MRA are used to analyze the data in IBM SPSS v27. While leverage has a positive and substantial effect on fraudulent financial statements, voluntary disclosure quality has no discernible effect. ROA is unable to mitigate the impact of VDQ, but it can mitigate the impact of leverage on FS fraud. These results lend credence to the Fraud Triangle Theory, which states that financial reporting fraud is more likely when leverage is present and that voluntary disclosure quality does little to reduce this risk.

Keywords: Voluntary Disclosure Quality, Leverage, Return on Assets, Fraudulent Financial Statement, Beneish M-Score, Fraud Triangle Theory

INTRODUCTION

Fraudulent financial statement (FFS) is one form of financial reporting deviation that can have negative impacts on the stability of the capital market (Honesty et al., 2024). This method is employed when a business provides financial statements that do not accurately portray the company's financial health (Skousen et al., 2009). Besides eroding investor confidence, FFS also reflects the weakness of corporate oversight and governance (Sugianto, 2019).

The real estate and property sector is one of the sectors most vulnerable to FFS due to its capital-intensive nature, high leverage levels, and flexibility in recognizing long-term project income, which creates significant room for management to engage in opportunistic accounting adjustments (Fadli et al., 2022). This indicates that the real estate and property sector exhibits a comparatively elevated degree of fraud vulnerability compared to other sectors, particularly because of its capital-intensive business nature, high risk, and heavy reliance on market perception of project prospects. (Zaputra & Marlina, 2022) emphasize the importance of audit quality as a control mechanism, evident from their research focus on examining the effect of auditor independence on audit quality, which in turn is related to the reporting quality of various companies. Numerous cases demonstrate reporting manipulation, such as income recognition inconsistent with standards, profit engineering, or misleading financial position presentation. With these characteristics, the real estate sector is suitable as a focus for research to explore the determinants of FFS risk (Annisa & Kuntadi, 2024).

These phenomena are clearly reflected in the case of PT Hanson International Tbk, a property company that was once listed on the IDX with the stock code MYRX, which was proven to have committed errors in the presentation of material in its financial reports due to revenue recognition that didn't comply with accounting standards. (Keuangan, 2019). However, this recognition did not meet the requirements of PSAK 44 (PSAK 72 (Indonesia, 2017) on Accounting for Real Estate Activities, as the substance of the transaction did not meet the criteria for revenue recognition(Keuangan, 2019). This condition demonstrates how FFS practices can trigger significant economic consequences for the company and its shareholders (Puspadini, 2024).

Furthermore, high leverage and declining profitability are indicators frequently associated with a drop in market confidence in a company. High leverage reflects a significant reliance on debt financing, thereby increasing financial risk and placing pressure on management to sustain corporate performance. Low profitability, on the other hand, suggests that you aren't very good at making money off of your current assets. Share prices in the capital market can fall when a firm has excessive leverage and low profitability since it affects how investors see the company's future (Lestari & Lestari, 2024). The probability of misleading financial reporting escalates when management encounters pressure to fraudulently enhance the company's performance metrics to maintain investor confidence. (Cressey, 1953).

The study relies on Fraud Triangle Theory, which states that three primary elements—opportunity, pressure, and rationalization—influence manipulation (Cressey, 1953). Pressure can arise due to high debt obligations, while opportunity can arise because of low company information transparency. Research (Mulyandini

& Natita, 2021) shows that the factors in Fraud Triangle can be used to detect the possibility of Fraudulent Financial Statement.

One factor that is suspected to affect FFS is Voluntary Disclosure Quality. High-quality voluntary disclosure can reduce information asymmetry and narrow the chances of financial reporting manipulation (Diantimala et al., 2022). Conversely, low-quality disclosure can increase the risk of FFS (Annisa & Kuntadi, 2024). Additionally, Leverage is also suspected to affect FFS because high debt levels can create financial pressure that encourages management to engage in financial reporting manipulation (Saputra & Marlina, 2022).

The correlations between Voluntary Disclosure Quality and Leverage on FFS is expected to be influenced by the company's profitability condition, proxied by ROA. Companies with high ROA tend to have lower pressure to engage in financial reporting manipulation compared to companies with low ROA (Kasmir, 2021; Pratiwi & Nurlela, 2024). Additionally, good reporting quality can also enhance investor confidence and company value (Rizky & Winarso, 2025).

Little is known about how Indonesian property and real estate businesses' voluntary disclosure quality impacts the prevalence of FFS. The majority of research on FFS determinants looks at the fraud triangle, pentagon, or hexagon, with financial situation and corporate governance being the main contributors (Wardhana et al., 2025). Additionally, research findings on the affect of Voluntary Disclosure Quality and Leverage on FFS still show inconsistency. (Diantimala et al., 2022) and (Annisa & Kuntadi, 2024) found that low information disclosure quality increases the risk of financial reporting fraud, whereas, (Saputra & Marlina, 2022) showed that leverage affects the increase in FFS risk. To address this information gap, this study will use the IDX as a proxy for the property and real estate industry and will analyze the relationship between fraudulent financial statements, leverage, and voluntary disclosure quality for the years 2020–2024, with ROA acting as a moderating variable.

REVIEW OF LITERATURE

Fraud Triangle Theory

According to the Fraud Triangle Theory, there are primarily three reasons why fraud can happen: justification, opportunity, and pressure. (Cressey, 1953). In this research, the theory explains that Leverage reflects the pressure (pressure) arising from the company's debt obligations, while Voluntary Disclosure Quality reflects the opportunity (opportunity) because it relates to the level of transparency of information provided to stakeholders. Additionally, ROA describes the company's performance condition, which can strengthen or weaken the effect of the two factors on the occurrence of Fraudulent Financial Statement.

Voluntary Disclosure Quality

Voluntary Disclosure Quality reflects the quality of information disclosure undertaken by companies voluntarily outside the mandatory requirements set by regulators. The disparity in data among stakeholders and management can be mitigated through superior voluntary disclosure. This gives stakeholders a more complete picture of the company's health. This study uses the Management Discussion and Analysis (MD&A) index to quantify Voluntary Disclosure Quality. The index shows how open a company is about sharing information regarding performance, risks, strategy, and

commercial prospects (Diantimala et al., 2022) state that high disclosure quality can reduce the likelihood of fraud because it enhances external transparency and oversight. Conversely, low disclosure quality can increase the likelihood that management conceals important information and engages in financial reporting manipulation.

Leverage

Leverage measures how much debt a firm has in relation to its assets and operations. Management may feel the pinch when the company's debt levels are high since they represent its commitments to creditors (Kasmir, 2015) notes that organizations burdened with substantial debt often find themselves under intense pressure to satisfy their financial commitments and keep up appearances of strong financial performance for the sake of their creditors and investors (Saputra & Marlina, 2022) It should be noted that the risk of fraudulent financial statements might be heightened when management is under financial pressure from leverage, as they are motivated to portray the company's status in a more favorable light than what is actually happening. The DER is use as a proxy for leverage in this research.

Return On Assets

One profitability statistic that may be use to evaluate a company's performance is its ROA. ROA quantifies the efficiency with which an organization turns its assets into profit. The hypothesis of this inquiry is that the influence of Voluntary Disclosure Quality and Leverage on Fraudulent Financial Statement can be amplified or attenuated by business profitability. ROA is used as a moderating variable to test this hypothesis. (Pratiwi & Nurlela, 2024) state that companies with low ROA tend to face greater pressure to demonstrate good performance, therefore making financial statement fraud more likely. Conversely, high ROA can reduce management pressure and discourage the tendency to commit fraud.

Fraudulent Financial Statement

When a company's financial records are skewed and don't represent its true financial health, this is known as a fraudulent financial statement. This fraud is committed intentionally by misstating or omitting material information that can mislead financial report users, particularly investors and creditors. According to (Sugiyono, 2019), Fraudulent Financial Statement occurs when management intentionally manipulates accounting figures through practices such as recognizing revenue that does not meet standards, manipulating profits, or inflating assets, so that financial reports are no longer reliable as a basis for decision-making. Meanwhile, (Beneish, 1999) defines Fraudulent Financial Statement as an intentional misrepresentation of financial information, meaning the presentation of financial information that is deliberately misleading to influence market perception of the company's performance and prospects.

Hypothesis

Voluntary Disclosure Quality reflects the extent to which a company voluntarily discloses relevant, complete, and transparent information to the public. Based on Fraud Triangle Theory, poor disclosure quality can increase the likelihood of financial statement manipulation due to increased information asymmetry between management and stakeholders. On the flip side, financial statement fraud is less likely when a company's voluntary disclosures are of greater quality. This is because external parties are

able to more easily monitor the information provided, making it more visible. Hence, the following is the way the first hypothesis might be stated:

H1: Voluntary Disclosure Quality Affects Fraudulent Financial Statement.

Leverage reflects the level of debt usage in a company's financing structure. According to Fraud Triangle Theory, high leverage can put pressure on management to meet obligations to creditors and maintain the company's financial performance. This pressure may encourage management to manipulate financial reporting to make the companies condition appear better than the actual situation. As a result, the probability of a fraudulent financial statement increases as a company's leverage level climbs. This leads us to the following formulation of the second hypothesis:

H2: Leverage Affects Fraudulent Financial Statement.

One measure of a business's profitability is its ROA. There is less of an incentive for profitable companies to falsify their financial reports than there is for less profitable ones. In this setting, the probability of a FFS is less likely to occur as a result of high-quality voluntary disclosure. On the flip side, low-profit businesses may not reap the full benefits of voluntary disclosure because they are under so much pressure. Thus, the following might be stated as the third hypothesis:

H3: Return on Assets (ROA) moderates the effect of Voluntary Disclosure Quality on Fraudulent Financial Statement.

The correlation between leverage and fraudulent financial statements is likely to be impacted by return on assets (ROA) as well. Leverage is less of a problem for highly profitable companies because they are better able to pay their bills. Conversely, companies with low profitability will face greater pressure to maintain financial performance and meet obligations to creditors. This situation can increase t he likelihood that management will engage in financial reporting manipulation. Thus, the following can be stated as hypothesis four:

H4: Return on Assets (ROA) moderates the effect of Leverage on Fraudulent Financial Statement.

Voluntary Disclosure Quality and Leverage are factors related to the opportunities and pressures in the occurrence of financial reporting fraud. Low-quality disclosure can increase the likelihood of financial reporting manipulation, while high leverage levels can increase the pressure faced by management. The combination of these two conditions can promote the occurrence of Fraudulent Financial Statement. So, the following is how we might formulate hypothesis five:

H5: Voluntary Disclosure Quality and Leverage affect Fraudulent Financial Statement on property and real estate companies listed on the Indonesia Stock Exchange during the period 2020–2024.

The occurrence of Fraudulent Financial Statement is influenced by various factors arising from the pressures or opportunities faced by companies. Voluntary Disclosure Quality is related to corporate information transparency, while Leverage is related to financial pressure arising from debt usage. ROA is a measure of a company's performance that could have an enhanced or diminished impact on the two components of the fraudulent financial statement. So, the following is how we might formulate hypothesis six:

H6: Voluntary Disclosure Quality and Leverage affect Fraudulent Financial Statements with Return on Assets (ROA) as a moderating variable for property

and real estate companies listed on the Indonesia Stock Exchange during the period 2020–2024.

RESEARCH METHOD

The effect of Voluntary Disclosure Quality, Leverage, and Fraudulent Financial Statements on ROA, a moderating variable, is examined in this study using a quantitative methods with an associative approach. Companies registered on the IDX in the property and real estate sector from 2020 to 2024 are the subject of this research. Secondary data is culled from business websites and annual reports made public on the IDX website as well as those of individual companies. A total of 145 observations were made throughout the research period, and the sample consisted of 29 companies. Purposive sampling based on predetermined criteria was employed for the sampling process. According to this research, the dependent variable is the Beneish M-Score for FFS. The MD&A index and the DER are two independent variables that evaluate the quality of voluntary disclosure. One such variable that is used as a moderator is ROA, this is calculated as net profit divided by total assets. Data are analyzed using descriptive statistical methods, classical assumption tests, linear regression, and MRA.The objective of this test is to determine if ROA moderates the link between Voluntary Disclosure Quality and Leverage with Fraudulent Financial Statement. For data processing, researchers use SPSS v27 and Excel 2019.

This study's regression model:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 Z + \beta_4 (X_1 Z) + \beta_5 (X_2 Z) + \varepsilon$$

Notes:
- Y = Dependent Variable (Fraudulent Financial Statement);
- X_1 = Independent Variable 1 (Voluntary Disclosure Quality);
- X_2 = Independent Variable 2 (Leverage);
- Z = Moderating Variable (Return On Assets);
- X_1Z/ X_2Z = Interaction between Independent Variables and Moderating Variable;
- α (alpha) = Constant;
- β_1, β_2, β_3, β_4, β_5 = Regression coefficients;
- ε (epsilon) = Error term (unobserved but influenced variable).

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Table 1.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Voluntary Disclosure	145	.71	1.00	.8917	.11242
Leverage	145	.003	4.15	.6861	.68944
ROA	145	-.51	7.46	.0914	.67859
Fraud	145	-6.74	84.40	-.2778	8.30136
Valid N (listwise)	145				

Source: Data processed by SPSS (Data processed, 2026)

According to the descriptive analysis results from 145 observations, a picture of the characteristics of each research variable was obtained. The Voluntary Disclosure variable showed a minimum value of 0.71 and a maximum of 1.00, with an average of 0.8917. Leverage has a minimum value of 0.00 and a maximum of 4.31, with an average of 0.7834. Return on Assets (ROA) shows highly variable conditions, with a minimum value of −0,51 and a maximum of 534.58. The average ROA is 7.3966. Fraudulent Financial Statement has a minimum value of −6,74 and a maximum of 84.40, with an average of −2,7778.

Normality Test

Table 2.
Normality Test

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			145
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		.97343203
Most Extreme Differences	Absolute		.031
	Positive		.031
	Negative		-.025
Test Statistic			.031
Asymp. Sig. (2-tailed)[c]			.200[d]
Monte Carlo Sig. (2-tailed)[e]	Sig.		.985
	99% Confidence Interval	Lower Bound	.982
		Upper Bound	.988

Source: Data processed by SPSS (Data processed, 2026)

The unstandardized residuals from the regression model were subjected to normality testing use the One-Sample K-S Test. The data were derived from 145 observations (N = 145). At its most extreme, the Test Statistic value of 0.031 proves the empirical residual distribution is significantly different from the theoretical normal distribution. A modest distance like this one suggests that the residual distribution deviates very little from the normal curve. The minimal residual deviation from the normal distribution is supported by the Most Extreme Differences value of 0.031, which is positive 0.031 and negative −0, 025.

In making decisions on normality, the significance value is the main factor. There is an asymptotic significance level of 0.200 in the test outcomes. The null hypothesis (H0), indicating that the residuals are normally distributed, is accepted because the significance value is higher than 0.05 (0,200 > 0.05). Statistical evidence does not support the claim that the residuals do not follow a normal distribution. Got the usual. To rephrase, the data do not support the conclusion that the residuals are not normally distributed.

Multicollinearity Test

Table 3.
Multicollinearity Test

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Voluntary Disclosure	.956	1.046
	Leverage	.965	1.036
	ROA	.975	1.026

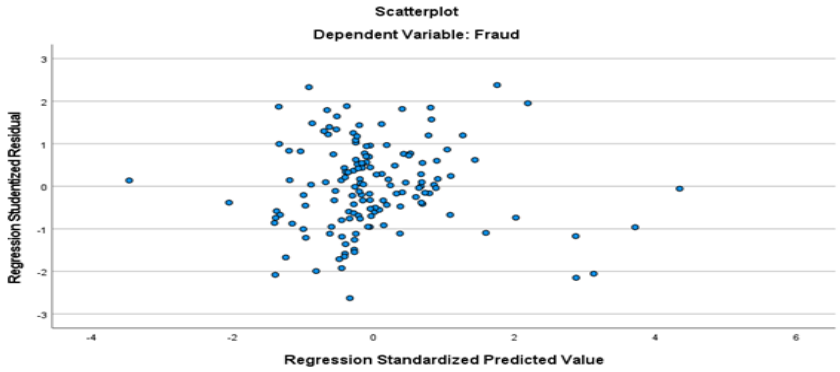
a. Dependent Variable: Fraud

Source: Data processed by SPSS (Data processed, 2026)

A VIF for Voluntary Disclosure score of 1.046, a Leverage score of 1.036, and a ROA score of 1.026 were determined by the multicollinearity test. The Voluntary Disclosure Score variable has a tolerance value of 0.956, Leverage of 0.965, and ROA of 0.975. According to these findings, neither the independent variables nor the moderating variables have a VIF< 10 with a tolerance > 0, 10. This implies that neither of these variables is related to the other, and that multicollinearity is not present.

Heteroscedasticity Test

Figure 1. Scatterplot Heteroscedasticity Test



A scatterplot representing the relationship between the Y-axis of Studentized Residual Regression and the X-axis of Regression Standardized Predicted Value is used to verify the test heteroscedasticity image. The residual dots scatter haphazardly about the zero-line horizontally, as seen in the graph. There doesn't appear to be any discernible pattern, be it a funnel, fan, wave, or organized linear arrangement.

The uniform distribution of dots across the whole plot region, spanning both the X-axis and the zero line, suggests that the relative residual variance remains consistent across all levels of anticipated values. To rephrase, the model's projected values are unaffected by their height or lowness, as the assumption of homoscedasticity is met.

In addition to confirming that the regression model is free of specification issues like an incorrect model form, missing critical variables, or improper data translation, the lack of specific patterns suggests that these problems are not present. The reasonableness of the remaining errors is supported by the fact that the residuals follow a random distribution, which indicates that the model effectively captures the correlations between the variables.

Autocorrelation Test

Table 4.
Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.192[a]	.037	.016	.9837332	1.982

a. Predictors: (Constant), ROA, Leverage, Voluntary Disclosure

b. Dependent Variable: Fraud

Source: Data processed by SPSS (Data processed, 2026)

The Durbin-Watson autocorrelation test applied to the table above yielded a value of 1.982. With a sample size of 145 observations and 3 independent variables (Voluntary Disclosure, Leverage, and ROA), the dU value of 1.718 at the 5% significance level indicates that the DW value of 1.982 falls within the interval dU <DW < 4-dU (1.718 < 1,982 < 2,282), the regression model does not exhibit any positive or negative autocorrelation, as a result.

Moderated Regression Analysis (MRA)

Table 5.
Result of Moderated Regression Analysis (MRA)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.906	.688		-1.317	.190
	Voluntary Disclosure	.678	.743	.077	.913	.363
	Leverage	.444	.141	.308	3.141	.002
	ROA	-9.739	4.798	-6.662	-2.030	.044
	X1M	10.450	6.009	5.445	1.739	.084
	X2M	4.901	2.096	1.206	2.338	.021

a. Dependent Variable: Fraud

Source: Data processed by SPSS (Data processed, 2026)

According on the table above, the regression equation and the outputs of the linear regression analyze in research below:

$$\mathbf{Y = -0{,}906 + 0{,}678X_1 + 0{,}444X_2 - 9739Z + 10{,}450X_1Z + 4{,}901X_2Z + \varepsilon.}$$

A constant of -0.906 indicates that if Voluntary Disclosure, Leverage, and ROA are greater than 0, the magnitude of Fraud will tend to be negative and decrease. The regression coefficient for Voluntary Disclosure is 0.678, meaning that every 1-unit increase in Voluntary Disclosure will increase Fraud by 0.678 units. This effect is not statistically significant, so changes in Voluntary Disclosure alone do not appear to significantly affect Fraud in this sample. Leverage has a regression coefficient of 0.444,

which means that for every one unit increase in Leverage, Fraud will rise by 0.444 units. This demonstrates that leverage has a substantial impact on fraud, hence the risk of fraud increases as a company's leverage rises. The ROA variable has a regression coefficient of -9.739, which means that there is a -9.739 unit decrease in Fraud for every 1 unit rise in ROA. Companies with higher profits also tend to have reduced fraud risk, suggesting that ROA has a substantial impact on this metric. The variable X1M (interaction between Voluntary Disclosure and ROA) has a positive coefficient of 10.450, indicating that ROA strengthens the effect of Voluntary Disclosure on Fraud. This effect is nearly significant ($\alpha = 0{,}10$), suggesting moderation by ROA. The variable X2M (interaction between Leverage and ROA) has a positive coefficient of 4.901, meaning that ROA strengthens the effect of Leverage on Fraud. This effect is significant, so ROA acts as a moderating variable that intensifies the correlations between leverage and Fraud.

Table 6.
Result of Analysis of Determination Coeffocient, Voluntary Disclosure, Leverage and ROA

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.192[a]	.037	.016	.9837332

a. Predictors: (Constant), ROA, Leverage, Voluntary Disclosure

b. Dependent Variable: Fraud

Source: Data processed by SPSS (Data processed, 2026)

An R-square value of 0.037 is shown by the variables Voluntary Disclosure, Leverage, + ROA. Consequently, it can deduce that fraud is elucidated by elements beyond the three independent variables, accounting for just 3.7% of the total.

Table 7.
Result of Analysis of Determination Coefficient Moderasi of Voluntary Disclosure, ROA and Leverage ROA Moderation

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.288[a]	.083	.050	.9667209

a. Predictors: (Constant), X2M, Voluntary Disclosure, Leverage, X1M, ROA

b. Dependent Variable: Fraud

Source: Data processed by SPSS (Data processed, 2026)

Adding two moderation variables (Voluntary Disclosure Moderated ROA and Leverage Moderated ROA) improved the model's explanatory power. The R Square increased to 0.083, meaning the model could explain 8.3% of the variance in Fraud. The increase was 4.6% (R Square Change = 0,046)) seems to suggest that the inclusion of moderating variables helps the model to better describe the dependent variable.

Adjusted R Square also rose to 0.050, confirming that adding the moderation variables contributed to enhancing the model's quality. Meanwhile, 91.7% of the variance in Fraudulent Financial Statement is accounted for by additional variables not included in the research model, such as corporate governance mechanisms, audit quality, firm size, liquidity, financial distress, company gro wth, internal control effectiveness, and other factors that may influence the occurrence of Fraudulent Financial Statement.

Hypothesis Testing

Table 8.
Hypothesis Test Result (Uji T)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.887	.680		-1.305	.194
	Voluntary Disclosure	.797	.737	.090	1.081	.281
	Leverage	.258	.120	.179	2.144	.034

a. Dependent Variable: Fraud

Source: Data processed by SPSS (Data processed, 2026)

The t-test results were used at a significance threshold of α = 0.05. The t-table value is 1.977, calculated using the formula (α/2; n-k-1), where n is the total number of research samples (145), and k is the number of independent variables (two in this case).

Table 9.
Hypothesis Test Result: Moderating Variable (T-Test)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.906	.688		-1.317	.190
	Voluntary Disclosure	.678	.743	.077	.913	.363
	Leverage	.444	.141	.308	3.141	.002
	ROA	-9.739	4.798	-6.662	-2.030	.044
	X1M	10.450	6.009	5.445	1.739	.084
	X2M	4.901	2.096	1.206	2.338	.021

a. Dependent Variable: Fraud

Source: Data processed by SPSS (Data processed, 2026)

The interaction between Voluntary Disclosure and ROA shows a calculated t-value of 1.739, it's larger than the t-table value of 1.977, with a significance level of 0.084> 0.05. This result proves that ROA moderates the correlations between Voluntary Disclosure and Fraud (weakening it).

The interaction between Leverage and ROA indicates a calculated t-value of 2.338, which is lower than the t-table value of 1.977 with a significance level of 0.021 > 0,05. Therefore, ROA moderates the relationship between Leverage and Fraud positively and significantly (strengthening it).

Table 10.
Hypothesis Test Result (Uji F)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.968	2	2.484	2.580	.079[b]

	Residual	136.723	142	.963		
	Total	141.691	144			

a. Dependent Variable: Fraud

b. Predictors: (Constant), Leverage, Voluntary Disclosure

Source: Data processed by SPSS (Data processed, 2026)

Seeing that the F_{hitung} value is 2,580 with a significance level of 0,079. This value is significantly lower than the F_{tabel} value of 3,06 (at $\alpha = 0.05$), demonstrating that the independent variables Voluntary Disclosure and Leverage are unlikely to collectively exert a substantial influence on Fraud.

Table 11.
Hypothesis Test Result Moderating Variable (F-Test)

ANOVA[a]

Model	Sum of Squares	df	Mean Square		F	Sig.
Regression	11.789	5	2.358	2.523	.032[b]	
Residual	129.902	139	.935			
Total	141.691	144				

a. Dependent Variable: Fraud

b. Predictors: (Constant), X2M, Voluntary Disclosure, Leverage, X1M, ROA

Source: Data processed by SPSS (Data processed, 2026)

Seeing that the F_{hitung} value is 2.580 with a significance level of 0,079. This value is significantly lower than the F_{tabel} value of 3.06 (at $\alpha = 0.05$), which proves that the independent variables Voluntary Disclosure and Leverage, together, not significantly affect Fraud.

The Effect of Voluntary Disclosure Quality on Fraudulent Financial Statement

Test results indicate that Voluntary Disclosure Quality doesn't significantly impact Fraudulent Financial Statement (sig. 0,281 > 0,05), thus H1 is reject. This finding suggests that voluntary disclosure quality has not been able to suppress or increase the potential for financial reporting fraud. From the standpoint of Fraud Triangle Theory, the high quality of disclosure may not necessarily reflect the company's actual condition because management still has opportunities to manipulate financial reporting. This result indicates that information transparency alone is not sufficient to prevent Fraudulent Financial Statement. The results are consistent with Agency Theory (Jensen & Meckling, 1976), It clarifies how, despite the company's substantial voluntary transparency, management is still able to manipulate financial statements due to knowledge asymmetry and the conflict of interest between shareholders and management. Additionally, Fraud Triangle Theory (Cressey, 1953) explains that the element of opportunity can still encourage fraud if not supported by effective internal control systems and corporate governance. Therefore, information transparency alone is not sufficient to prevent Fraudulent Financial Statement.

The outcomes of this research are not consistent with the study (Handayani & Zulfikar, 2023), (Mahendra & Putri, 2024), and (Setyawati & Prabowo, 2024)) according to which misleading financial statements are affected by disclosure quality in a negative way. This finding, however, demonstrates that openness of information is insufficient to forestall fake financial statements in the absence of adequate internal control mechanisms, strong corporate governance, and internal supervision.

The Impact of Leverage on Fraudulent Financial Statements

The study's findings suggest that researchers can accept H2 since leverage significantly affects fraudulent financial statements (sig. 0,032 < 0,05). According to these results, The probability of financial statement manipulation increases as a company's leverage rate rises. These results support the Fraud Triangle Theory (Cressey, 1953), according to which financial pressure is a major motivator for deception. The companies high obligations can increase pressure on management to maintain financial performance, thereby encouraging the presentation of financial reports that do not align with the actual condition. This finding is also consistent with the Agency Theory (Jensen & Meckling, 1976), This clarifies how misaligned goals between owners and management could lead to financial reporting bias.

These research results support the studies (Putri & Ananto, 2020), (Pranata et al., 2023), and (D. Hidayat & Rahman, 2024) that assert leverage positively affects deceitful financial accounts. For this reason, leverage is a key metric to look for while investigating real estate and property fraud.

The Role of Return on Assets (ROA) in Moderating the Impact of Voluntary Disclosure Quality on Fraudulent Financial Statements

The findings of the tests show that the interaction between Voluntary Disclosure Quality and ROA does not significantly affect Fraudulent Financial Statements (sig. 0,084 > 0,05), thus H3 is rejected. This indicates that a company's profitability level does not affect the correlations between voluntary disclosure quality and the potential for financial statement fraud. This outcomes aligns with the Signaling Theory (Spence, 1973), As per which, a company's profitability indicates its success. However, this signal is not sufficient to enhance the effectiveness of voluntary disclosure in reducing the risk of fraudulent financial statements. Therefore, voluntary disclosure quality still cannot prevent fraud even if the company has high profitability.

Thus findings suggest that not support the study (Nuraini & Kurniawan, 2024) which found that ROA can moderate the correlations between voluntary disclosure quality and fraudulent financial statements.

The Role of Return on Assets (ROA) in Moderating the Impact of Leverage on Fraudulent Financial Statements

The research results indicate that the interaction between Leverage and ROA significantly affects Fraudulent Financial Statements (sig. 0,021 < 0,05), thus accepting H4. Profitability appears to amplify the correlation between leverage-induced financial strain and the possibility of financial statement fraud. Thus finding support the Fraud Triangle Theory (Cressey, 1953), which explains that financial pressure can increase the likelihood of management engaging in fraud. When a company maintains a certain level of profitability, the pressure from high leverage can further encourage financial statement manipulation practices. This finding is also supported by Agency Theory (Jensen & Meckling, 1976), which explains that management tends to act opportunistically to maintain company performance in the face of shareholders and creditors.

These results support the research (Anggraini & Santoso, 2023) and (T. Hidayat & Rahman, 2024) claims that ROA can modify the correlation between leverage and false financial reporting.

The Effect of Voluntary Disclosure Quality and Leverage on Fraudulent Financial Statements.

The simultaneous test outcomes show that Voluntary Disclosure Quality and Leverage jointly have no significant effect on Fraudulent Financial Statements (sig. 0,079 > 0,05), thus H5 is rejected. This outcome suggests that the two variables are still unable to comprehensively explain the variation in Fraudulent Financial Statement. These results align with Agency Theory (Jensen & Meckling, 1976), which presented that financial reporting fraud is impacted by various

factors, such as conflict of interest, information asymmetry, corporate governance, audit quality, and internal control effectiveness. Therefore, fraudulent financial statements are not only affected by voluntary disclosure quality and leverage but also by other factors outside the study model.

The Impact of Voluntary Disclosure Quality and Leverage on Fraudulent Financial Statement with ROA as a Moderating Variable

After incorporating ROA and the interaction variable into the model, the test outcomes showed a significant impact on Fraudulent Financial Statement (sig.

0,032 < 0,05), thus accepting H6. Additionally, the coefficient of determination increased from 3.7% to 8.3%, indicating that the presence of ROA enhances the model's ability to explain the variation in Fraudulent Financial Statement. This discovery is consistent with Contingency Theory. (Fiedler, 1967), which explains that the relationship between variables is influenced by certain conditions. In this study, profitability plays a role as a factor that strengthens the relationship between leverage and Fraudulent Financial Statement, thereby increasing the model ability to presented the risk of financial reporting fraud. This finding also supports Fraud Triangle Theory (Cressey, 1953), which asserts that financial pressure influenced by leverage and profitability conditions can increase the risk of fraud.

CONCLUSION

According to study on the affect of Voluntary Disclosure Quality and Leverage on the potential of Fraudulent Financial Statement with Return on Assets (ROA) as a moderating variable on property and real estate companies registered on the IDX during the period 2020–2024, it can be concluded that the Voluntary Disclosure Quality of the sample companies tends to be in the high category, while the Leverage level shows considerable variation among companies. Additionally, Fraudulent Financial Statement measured using Beneish M-Score was still found in some companies during the research period, indicating the potential for report manipulation. The study found shown that Voluntary Disclosure Quality doesn't significantly affect Fraudulent Financial Statement. This finding suggests that high-quality voluntary disclosure may not be able to suppress the occurrence of financial report fraud. Conversely, Leverage positively and significantly affects Fraudulent Financial Statement, meaning that the higher a co mpany's debt level, the greater the potential for financial report manipulation due to the financial pressure the company faces. As a moderating variable, ROA was

unable to moderate the affect of Voluntary Disclosure Quality on Fraudulent Financial Statement.

Nevertheless, Return on Assets (ROA) was found to mitigate the impact of Leverage on Financial Statement Fraud. The correlation between financial strain from debt and the likelihood of financial report fraud is strengthened, according to these findings, by a company's profitability. In the meantime, the quality or leverage of voluntary disclosure has no significant correlation with fraudulent financial statements. By including ROA as a moderating variable, the study model becomes more effective at explaining variation in financial report fraud and suggests that fraudulent financial statements are significantly impacted. When considering the possibility of falsified financial statements, property and real estate enterprises should emphasize profitability, according to these data. Further investigation is needed to broaden the scope and duration of the study, and to incorporate additional factors that could impact fraudulent financial statements. These factors include internal control effectiveness, external pressure, financial distress, financial targets, audit quality, and corporate governance. As a result, we anticipate that the findings will shed light on the many elements that contribute to financial report falsification.

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